

AMENDMENT AND RESPONSE TO NON-FINAL OFFICE ACTION
U.S. Patent Application Serial No. 10/748,505
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AMENDMENTS IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method, comprising:

selecting from an inverted index at least,

a first item associated with a first item entry having a first listing of articles associated with the first item, and

a second item different from the first item, the second item associated with a second item entry having a second listing of articles associated with the second item
~~plurality of items, each item having an entry in an inverted index, each item entry comprising a listing of articles that the item appears in;~~

determining whether to compress the second item entry into the first item entry at
~~least a first item entry and a second item entry for compression; and~~

compressing the second item entry into the first item entry~~resulting in a compressed first item entry based at least in part on the determination.~~

2. (Currently Amended) The method of claim 1, wherein determining whether to compress the first~~second~~ item entry and into the ~~second~~first item entry for ~~compression~~ comprises:

determining a cost-benefit ratio for compressing the second item entry into the first item entry; and

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comparing the cost-benefit ratio with an acceptable value to determine if the cost-benefit ratio is acceptable.

3. (Original) The method of claim 2, wherein the item entry further comprises an item value for each article that the item appears in.

4. (Original) The method of claim 3, wherein the item value is a representation of the strength of the item in the article.

5. (Original) The method of claim 3, wherein the item value is a representation of whether the item appears in the article.

6. (Currently Amended) The method of claim 3, wherein a cost for the cost-benefit ratio comprises a representation of the loss in precision that can be caused by compressing the first and second item entries or the additional processing time that can be required when utilizing a compressed entry.

7. (Original) The method of claim 6, wherein determining a cost for the cost-benefit ratio comprises determining how much the first item entry and the second item entry have to change when the second item entry is compressed into the first item entry.

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8. (Original) The method of claim 2, wherein a benefit for the cost-benefit ratio is a representation of the amount of memory saved if the first and second item entries were compressed.

9. (Original) The method of claim 1, wherein the items comprise words, concepts or images.

10. (Original) The method of claim 2, wherein the acceptable value is predetermined.

11. (Currently Amended) A method, comprising:

selecting from an inverted index at least

a first item associated with a first item entry having a first listing of articles associated with the first item comprising an item value for each article, and

a second item different from the first item, the second item associated with a second item entry having a second listing of articles associated with the second item comprising an item value for each article ~~a plurality of items, each item having an entry in an inverted index, each item entry comprising a listing of articles that the item appears in and an item value for each article that the item appears in;~~

determining whether to compress the second item entry into the first item entry
~~at least a first item entry and a second item entry for compression by determining a cost-~~

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benefit ratio for compressing the second item entry into the first item entry and comparing the cost-benefit ratio with an acceptable value to determine if the cost-benefit ratio ~~n~~ is acceptable; and

if the cost-benefit ratio is acceptable, compressing the second item entry into the first item entry ~~resulting in a compressed first item entry~~ based at least in part on the determination.

12. (Currently Amended) The method of claim 11, wherein determining a cost for the cost-benefit ratio comprises determining how much the first item entry and the second item entry have to change when the second item entry is compressed into the first item entry.-

13. (Currently Amended) The method of claim 11, wherein a benefit for the cost-benefit ratio is a representation of ~~thean~~ an amount of memory saved if the first and second item entries were compressed.

14. (Original) The method of claim 11, wherein the acceptable value is predetermined.

15. (Original) The method of claim 11, wherein the items comprise words, concepts or images.

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16. (Currently Amended) A method, comprising:

selecting from an inverted index a plurality of items, each item different from the other selected items and each item having a listing of articles associated with the
item a plurality of items, each item having an entry in an inverted index, each item entry
comprising a listing of articles that the item appears in;

determining whether to compress the plurality of items a plurality of item
entries for compression; and

compressing the item entries based at least in part on the determination into a
compressed item entry.

17. (Original) The method of claim 16, wherein the plurality of item entries comprises three or more item entries.

18. (Currently Amended) A computer-readable medium containing program code, comprising:

program code for selecting from an inverted index at least,

a first item associated with a first item entry having a first listing of
articles associated with the first item, and

a second item different from the first item, the second item associated with
a second item entry having a second listing of articles associated with the second item;

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~~plurality of items, each item having an entry in an inverted index, each item entry comprising a listing of articles that the item appears in;~~

~~program code for determining whether to compress the second item entry into the first item entry at least a first item entry and a second item entry for compression; and~~

~~program code for compressing the second item entry into the first item entry resulting in a compressed first item entry based at least in part on the determination.~~

19. (Currently Amended) The computer-readable medium of claim 18, wherein determining whether to compress the second first-item entry into ~~and the first second item entry for compression~~ comprises:

~~program code for determining a cost-benefit ratio for compressing the second item entry into the first item entry; and~~

~~program code for comparing the cost-benefit ratio with an acceptable value to determine if the cost-benefit ratio is acceptable.~~

20. (Currently Amended) The computer-readable medium of claim ~~18~~17, wherein the item entry further comprises an item value for each article that the item appears in.

21. (Original) The computer-readable medium of claim 20, wherein the item value is a representation of the strength of the item in the article.

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22. (Currently Amended) The computer-readable medium of claim 20+9, wherein the item value is a representation of whether the item appears in the article.

23. (Currently Amended) The computer-readable medium of claim 22, wherein a cost for the cost-benefit ratio comprises a representation of the loss in precision that can be caused by compressing the first and second entries or the additional processing time that can be required when utilizing a compressed entry.

24. (Original) The computer-readable medium of claim 20, wherein determining a cost for the cost-benefit ratio comprises program code for determining how much a first item entry and a second item entry have to change when the second item entry is compressed into the first item entry.

25. (Original) The computer-readable medium of claim 19, wherein a benefit for the cost-benefit ratio is a representation of the amount of memory saved if the first and second item entries were compressed.

26. (Original) The computer-readable medium of claim 18, wherein the items comprise words, concepts or images.

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27. (Original) The computer-readable medium of claim 19, wherein the acceptable value is predetermined.

28. (Currently Amended) A computer-readable medium containing program code, comprising:

program code for selecting from an inverted index a plurality of items, each item different from the other selected items and each item having a listing of articles associated with the item ~~a plurality of items, each item having an entry in an inverted index, each item entry comprising a listing of articles that the item appears in;~~

program code for determining whether to compress the plurality of items ~~a plurality of item entries for compression;~~ and

program code for compressing the item entries based at least in part on the determination ~~into a compressed item entry.~~

29. (Original) The computer-readable medium of claim 28, wherein the plurality of item entries comprises three or more item entries.